

**ABSTRACT**

A method for operating an excimer or molecular fluorine laser system at a stabilized wavelength includes generating a laser beam and directing a beam portion through a wavelength measurement system, calibrating the wavelength measurement system to an absolute reference, determining the wavelength of the laser beam including figuring in a drift compensation value of the wavelength, and tuning the wavelength to a target wavelength when the determined wavelength differs from the target wavelength.

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